SOME INJURIOUS INDIAN WEEVILS (CURCULIONIDAE).

By GUY A. K. MARSHALL.

Phytoscaphus dissimilis, sp. nov.

Colour black, with greyish brown scaling; the prothorax with a broad ill-defined darker stripe on each side; the elytra with a conspicuous white spot at the base of the suture, and an oblique whitish stripe about the middle, with vague and variable dark brown patches on each side of it.



Fig. 1. Phytoscaphus dissimilis, sp. n.

Head more deeply immersed in the prothorax than usual, the forehead with a central stria and hardly narrower than the eyes, which are almost plane. Rostrum stout, the apex moderately dilated, the upper surface plane in the basal half, but anteriorly with a sharp central carina and a deep impression on each side of it, the scrobes deep and extending more than half-way to the eye, the upper lateral furrow deep, the lower absent, the under surface without a basal impression. Antennae with the scape gradually clavate and with a row of stiff bristles on the convex edge; the funicle with the two basal joints subequal, 3 to 7 not longer than broad, and 7 shorter than the first joint of the club. Prothorax as long as broad, the sides rounded, broadest before the middle, the base perfectly straight and not broader than the apex, the ocular lobes strongly developed, broadly rounded and without vibrissae, the upper surface with coarse punctation visible through the scaling. Elytra truncate at the base, the sides slightly dilated from the shoulder to behind the middle, the apices jointly rounded, the dorsal outline regularly convex, the setae stout, erect and spatulate. Legs with the anterior tibiae bisinuate internally, but without a distinct angulation, the corbels of the posterior tibiae open.

Length, $3\frac{1}{2}$ -4 mm.; width, $1\frac{1}{2}$ - $1\frac{3}{4}$ mm.

ASSAM: Patkai Hills and Sadiya (W. Doherty); Silonibari, N. Lakhimpur (H. Stevens).

Mr. Stevens notes that he has found this weevil nibbling the young shoots on teabushes.

Corigetus bidentulus, Fst.

Mr. H. Stevens records this species as a serious pest of tea at Silonobari, Assam, but nothing is known as to its life-history.

The general appearance of the insect is shown in the accompanying figure (fig. 2). The upper side colouring varies from greyish brown to dark brown, with a



Fig. 2. Corigetus bidentulus, Fst.

very irregular and variable brownish black band behind the middle, the lighter markings being pale metallic green. The lower surface is usually grey with a sprinkling of metallic green scales, but may be either entirely grey or entirely green.

Assam: Silonibari, N. Lakhimpur (H. Stevens); Naga Hills, Patkai Hills and Manipur (W. Doherty). Burma: Bhamo and Teinzo (L. Fea).

Rhynchaenus (Orchestes) mangiferae, sp. nov.

Light reddish yellow, the elytra rather darker round the scutellum, along the suture and along the lateral margin; thinly clothed with recumbent white hairs,

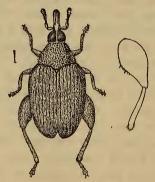


Fig. 3. Rhynchaenus mangiferae, sp. n.

with a few black ones interspersed, the white hairs rather thinner in places, giving the appearance of faint banding.

Head with the eyes separated by a very narrow line covered with white hairs and with a band of elongate white scales below the eyes. Rostrum rather short, about

as long as the prothorax, almost straight, very shiny and sparsely punctate, the base clothed with white hairs. Antennae inserted quite close to the base of the rostrum, the scape strongly clavate and short, about as long as the first two funicular joints; the funicle 6-jointed, joint 1 much longer and stouter than any of the others and clavate, 2 and 3 subequal and longer than broad, the remainder becoming shorter and more transverse; the club ovate, the apex blunt. Prothorax transverse, broadest at the base and strongly narrowed anteriorly, the sides quite straight and without any apical constriction, the basal margin roundly produced in the centre, the upper surface rather coarsely punctate throughout. Scutellum with a few white hairs. Elytra oval, the sides regular rounded, the shoulders very oblique, broadest before the middle, the apices separately rounded; shallowly striate, the striae indistinctly punctate, the intervals scarcely convex, coriaceous and shiny; the white hairs so sparse as hardly to conceal the integument, the black ones arranged for the most part in two rows on each interval. Legs pale yellow, thinly clothed with white hairs, the posterior femora very large, their lower edge armed with two distant small black spines, and beside these a row of 6 to 9 very minute black spines, the posterior tibiae with a horseshoe-shaped comb of black teeth at the apex.

Length, $1\frac{3}{4}$ -2 mm.; width, $\frac{7}{8}$ -1 mm.

Madras: Guntur, Godavari, Kistna.

The specimens before me (from Guntur) have all been bred, and it seems possible that the colouring of the elytra is not fully developed; it is probably darker in normal specimens.

The larvae of this beetle bore in the leaves of the mango tree, and an account of their life-history has already been published by Mr. T. Bainbrigge Fletcher ("Some South Indian Insects," p. 334, 1914). He says that the insect is "a minor pest of local importance. As many as 20–30 larvae may be found in one leaf and such leaves dry up completely; in such cases a good deal of damage may be done. The beetles also may cut small holes in the leaves, but the damage thus done is inconsiderable."

Pachytychius mungonis, sp. nov.

Pitch-brown, the prothorax with dark brown scales, some of which are paler towards the sides, and with a narrow central stripe of whitish scales; the elytra with fairly dense light brown scaling and with large confluent patches of creamy white scales, except on the first two intervals.

Head deeply set in the prothorax, and closely and coarsely punctate throughout. Rostrum moderately stout and strongly curved, with six closely punctate deep sulci, the external ones being much broader than the others in the basal half, the intervals convex, smooth and shiny, with occasional isolated punctures; in the 3 both the internal and external pairs of sulci reach the apex, the intermediate pair only reaching the antennae; in the 3 the internal pair of sulci scarcely reach the antennae, being continued to the apex in the form of a row of punctures. Prothorax much broader than long, the sides moderately rounded, broadest in front of the middle, abruptly narrowed and slightly constricted at the apex, the basal margin shallowly bisinuate; the dorsal surface very closely and evenly punctate throughout, but sometimes with

an abbreviated smooth central line. Elytra oblong-ovate, the sides parallel from the shoulder to well beyond the middle, the basal margin jointly sinuate; deeply striate, the striae containing large elongate punctures and becoming much broader and deeper at the apex, the intervals broad, plane and transversely wrinkled; the



Fig. 4. Pachytychius mungonis, sp. n.

scales are relatively large and oblong, and where they are dense the striae appear as narrow lines with hardly any trace of the punctures. Legs rather stout and fairly closely covered with pale scales, all the tibiae sinuate at the base, the posterior pair bluntly angulate internally near the middle.

Length, $4-5\frac{1}{2}$ mm.; width, $1\frac{3}{4}-2\frac{1}{4}$ mm.

MADRAS: Bellary, Kurnul.

This species is a pest of green gram, and Mr. T. Bainbrigge Fletcher gives the following information concerning it: "The eggs are laid in a hole bored in a seed of green gram (*Phaseolus mungo*) or cow-pea, the female having previously eaten her way inside the pod. Three eggs are usually laid in one pod, one at each end and the third in the middle of the pod. The grub on hatching feeds on the seed, devouring three or four seeds before it is full-fed, when it emerges from the pod and drops to the ground in which it pupates. A local pest, which may at times do considerable damage. Said to occur more commonly on areas of black cotton soil." ("Some South Indian Insects," p. 336, 1914.)